

## 1. Product and Company Identification

www.rxmarine.com

Product Name Zinc Oxide IP  
Part Number RXSOL-95-6592-025

RX MARINE INTERNATIONAL  
105, A wing , BSEL , TECH PARK.  
VASHI ,NEW BOMBAY 400703 INDIA

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

Phone +91 22 20871200 - 1400  
Fax +91 22 27612100 ::AOH :0091 9821214367  
Email [mail@rxmarine.com](mailto:mail@rxmarine.com)  
Website [www.rxmarine.com](http://www.rxmarine.com)

## 2. Composition / Information on ingredients

www.rxmarine.com

| Product name | Cas No    | EC No     | Weight      | Formula |
|--------------|-----------|-----------|-------------|---------|
| Zinc oxide   | 1314-13-2 | 215-222-5 | 81,39 g/mol | ZnO     |

## 3. Hazards Identification

www.rxmarine.com

|                                            |                                                                                                                                                                                                                                 |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Classification of the substance or mixture | Classification according to Regulation (EC) No 1272/2008 Acute aquatic toxicity (Category 1), H400 Chronic aquatic toxicity (Category 1), H410 For the full text of the H-Statements mentioned in this Section, see Section 16. |
| Hazard statement(s)                        | Very toxic to aquatic life with long lasting effects                                                                                                                                                                            |
| Precautionary statement(s)                 | P273 Avoid release to the environment. P391 Collect spillage. P501 Dispose of contents/ container to an approved waste disposal plant.                                                                                          |
| Classification of the substance or mixture | No data available                                                                                                                                                                                                               |
| Supplemental Hazard Statements             | No data available                                                                                                                                                                                                               |
| Other hazards                              | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.                              |

## 4. First Aid Measures

www.rxmarine.com

|                                                                            |                                                                                                                                     |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| General advice                                                             | No data available                                                                                                                   |
| If inhaled                                                                 | After inhalation fresh air.                                                                                                         |
| Eye Contact                                                                | After eye contact: rinse out with plenty of water. Remove contact lenses.                                                           |
| Swallowed                                                                  | After swallowing immediately make victim drink water (two glasses at most). Consult a physician. 4.2 Most important                 |
| Skin Contact                                                               | In case of skin contact Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately |
| Inhalation                                                                 | No data available                                                                                                                   |
| Ingestion                                                                  | No data available                                                                                                                   |
| Most important symptoms and effects, both acute and delayed                | The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11                 |
| Indication of any immediate medical attention and special treatment needed | No data available                                                                                                                   |

## 5. Fire-fighting Measures

www.rxmarine.com

|                                                       |                                                                          |
|-------------------------------------------------------|--------------------------------------------------------------------------|
| Flammability                                          | No data available                                                        |
| Suitable extinguishing media                          | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Special hazards arising from the substance or mixture | Zinc/zinc oxides                                                         |
| Advice for firefighters                               | Wear self-contained breathing apparatus for firefighting if necessary    |
| Protective Equipment                                  | No data available                                                        |
| Specific Hazards Arising from the Chemical            | No data available                                                        |

## 6. Accidental Release Measures

www.rxmarine.com

|                                                                     |                                                                                                                                                                                                                            |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal precautions, protective equipment and emergency procedures | Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8. |
| Environmental Precaution                                            | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.                                                                                     |
| Methods and materials for containment and cleaning                  | Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.                                                                                                 |
| Reference to other sections                                         | For disposal see section 13.                                                                                                                                                                                               |

## 7. Handling and Storage

www.rxmarine.com

|                                                              |                                                                                                                                                                                  |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling                                | Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2. |
| Conditions for safe storage, including any incompatibilities | Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Combustible Solids                                              |
| Specific end use(s)                                          | Apart from the uses mentioned in section 1.2 no other specific uses are stipulated                                                                                               |

## 8. Exposure controls and personal protection

www.rxmarine.com

|                                   |                                                                                                                                                                                                                                                                                                                |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Exposure controls                 | Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.                                                                                                                                                                                     |
| Engineering Control               | No data available                                                                                                                                                                                                                                                                                              |
| Eye/face protection               | Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).                                                                                                                             |
| Body Protection                   | Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.                                                                                                                                         |
| Skin protection                   | Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. |
| Respiratory protection            | For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle r (US) or type ABEKP2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).                                                    |
| Control of environmental exposure | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.                                                                                                                                                                         |

## 9. Physical and chemical properties

www.rxmarine.com

|                                              |                         |
|----------------------------------------------|-------------------------|
| Physical state                               | Powder                  |
| Colour                                       | White                   |
| Odour                                        | No data available       |
| Odor Threshold                               | No data available       |
| pH                                           | No data available       |
| Melting Point                                | No data available       |
| Boiling Point                                | No data available       |
| Flash Point                                  | No data available       |
| Evaporation Rate                             | No data available       |
| Flammability (solid, gas)                    | No data available       |
| Explosive limits                             | No data Available       |
| Upper/lower flammability or explosive limits | No data available       |
| Autoignition temperature                     | No data available       |
| Decomposition temperature                    | No data available       |
| Vapour pressure                              | No data available       |
| Viscosity                                    | No data available       |
| Relative Density                             | 5.610 g/cm <sup>3</sup> |
| Specific Gravity                             | No data available       |
| Partition coefficient                        | No data available       |
| Explosive properties                         | No data available       |
| Solubility                                   | No data available       |
| Ignition temperature                         | No data available       |
| Particle characteristics                     | No data available       |

## 10. Stability and reactivity

www.rxmarine.com

|                                    |                                                                                                                                                                        |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                         | No data available                                                                                                                                                      |
| Chemical stability                 | Stable under recommended storage conditions.                                                                                                                           |
| Possibility of hazardous reactions | No data available                                                                                                                                                      |
| Conditions to avoid                | No data available                                                                                                                                                      |
| Incompatible materials             | Strong oxidizing agents                                                                                                                                                |
| Hazardous decomposition products   | Hazardous decomposition products formed under fire conditions. - Zinc/zinc oxides Other decomposition products - No data available In the event of fire: see section 5 |

## 11. Toxicological information

www.rxmarine.com

|                                   |                                                                                                                                                                                                                      |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acute toxicity                    | LD50 Oral - Mouse - 7,950 mg/kg(Zinc oxide)<br><br>LC50 Inhalation - Mouse - 2,500 mg/m <sup>3</sup> (Zinc oxide)<br><br>Skin - Rabbit(Zinc oxide)<br><br>Result: Mild skin irritation - 24 h                        |
| Skin corrosion/irritation         | Eyes - Rabbit(Zinc oxide) Result: Mild eye irritation - 24 h Eyes - Rabbit(Zinc oxide) Result: Mild eye irritation - 24 h                                                                                            |
| Serious eye damage/irritation     | No data available(Zinc oxide)                                                                                                                                                                                        |
| Respiratory or skin sensitization | Hamster(Zinc oxide) Embryo Unscheduled DNA synthesis Hamster(Zinc oxide) Embryo Morphological transformation. Hamster(Zinc oxide) Embryo Sister chromatid exchange (Zinc oxide) Guinea pig Unscheduled DNA synthesis |
| Germ cell mutagenicity            |                                                                                                                                                                                                                      |

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reproductive toxicity                            | No data available                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Specific target organ toxicity - single exposure | No data available                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Additional Information                           | Zinc oxide dust or fume can irritate the respiratory tract. Prolonged skin pox. Exposure to high levels of dust or fume can cause metallic taste, ma and nausea followed by fever and chills. Severe overexposure may result i, prolonged or repeated exposure can cause:, Reversible liver enzyme abnormalities., Diarrhoea(Zinc oxide) To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Zinc oxide) |

## 12. Ecological information

www.rxmarine.com

|                                                     |                                                                                                                                                                                                    |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Persistence and degradability                       | No data available                                                                                                                                                                                  |
| Toxicity to fish                                    | LC50 - Oncorhynchus mykiss (rainbow trout) - 1.1 mg/l - 96.0 h(Zinc oxide)                                                                                                                         |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 0.098 mg/l - 48 h(Zinc oxide)                                                                                                                                  |
| Toxicity to algae                                   | Static test NOEC - Pseudokirchneriella subcapitata (microalgae) - 0,024 mg/l - 72 h (OECD Test Guideline 201)                                                                                      |
| Products Biodegradation                             | No data available                                                                                                                                                                                  |
| Mobility in soil                                    | No data availalbe                                                                                                                                                                                  |
| Results of PBT and vPvB assessment                  | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. |
| Other adverse effects                               | Very toxic to aquatic life.                                                                                                                                                                        |

## 13. Disposal considerations

www.rxmarine.com

|                         |                                                                                                                                                                 |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Waste treatment methods |                                                                                                                                                                 |
| Product                 | Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber. |
| Contaminated packaging  | Dispose of as unused product.                                                                                                                                   |

## 14. Transport information

www.rxmarine.com

|                              |                                                                                                                                                                                              |                                                                      |                                                                      |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|----------------------------------------------------------------------|
| UN number                    | ADR/RID:3077                                                                                                                                                                                 | IMDG:3077                                                            | IATA:3077                                                            |
| UN proper shipping name      | ADR/RID:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc oxide)                                                                                                                      | IMDG:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc oxide) | IATA:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc oxide) |
| Transport hazard class(es)   | ADR/RID:9                                                                                                                                                                                    | IMDG: 9                                                              | IATA:9                                                               |
| Packaging group              | ADR/RID:III                                                                                                                                                                                  | IMDG:III                                                             | IATA:III                                                             |
| Environmental hazards        | ADR/RID:Yes                                                                                                                                                                                  | IMDG:NO                                                              | IATA:Yes                                                             |
| Special precautions for user | Tunnel restriction code (-)                                                                                                                                                                  |                                                                      |                                                                      |
| Further information          | EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids. |                                                                      |                                                                      |

## 15. Regulatory information

www.rxmarine.com

**Safety, health and environmental regulations/legislation specific for** This material safety data sheet complies with the requirements of

## 16. Other information

[www.rxmarine.com](http://www.rxmarine.com)

### Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages.

**DISCLAIMER OF LIABILITY :** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

No data available